

- After XM and Sirius introduced traffic and weather programming, the NAB called for satellite radio to be prohibited from broadcasting local weather and traffic.¹³⁹
- Satellite radio has reacted to the increasing prevalence of other audio entertainment options, including MP3 players and Internet radio, by expanding the storage capacity of their receivers, permitting time shifting, allowing users to download songs from their CD collections and other music services, and offering Internet streams of their programming.¹⁴⁰

The NAB Coalition includes a chart purporting to show the “stark record of quality improvements in satellite radio over the past three years.”¹⁴¹ But by focusing exclusively on competitive responses between XM and Sirius, the NAB Coalition has completely ignored the extensive record of competitive responses among a variety of players. Exhibit E provides a more complete, though by no means comprehensive, timeline of events that have occurred just in the last three years in the audio entertainment marketplace. As the Exhibit shows, satellite radio providers, MP3 manufacturers, terrestrial radio providers, Internet radio providers, and mobile service providers all have introduced new services and products in response to other players in this dynamic and constantly evolving audio entertainment marketplace.

Broadcasters’ fierce opposition to the merger—indeed, to the very existence of satellite radio—clearly shows the extent to which terrestrial radio broadcasters recognize and fear competition from satellite radio.¹⁴² The NAB, along with its consultants, constituents, and

¹³⁹ See, e.g., Petition for Declaratory Ruling, NAB, MB Docket No. 04-160 (filed Apr. 14, 2004).

¹⁴⁰ CRA Competitive Effects Analysis at 26-27 (¶ 41).

¹⁴¹ NAB Coalition at 8.

¹⁴² Many commenters agree. See Brief Comments of Patrick Smith (filed June 14, 2007) (“I think the biggest testament that terrestrial radio is such a huge competitor to satellite radio is that they are the ones fighting the merger the hardest.”); Brief Comments of John O’Keefe (filed May 18, 2007) (“Unfortunately, the opposition to the proposed merger is not being driven by consumers, nor is its motivation consumer protection. Simply put, the opposition to the Sirius-

surrogates, have collectively filed hundreds of pages of comments and exhibits urging the Commission to reject the merger. Broadcasters have tirelessly lobbied Congress, individual state legislatures, and newspaper editorial boards urging them to oppose the merger.

Why? It is because they realize that the efficiencies created by the merger and their resulting benefits to consumers, including lower prices and greater choices, will make satellite radio a stronger competitor in the audio entertainment market. But, as Judge Richard Posner has written, such opposition is a “telling point” suggesting that a merger is lawful.¹⁴³ In fact, if terrestrial broadcasters truly believed that the merger would result in increased prices, decreased programming variety, and reduced innovation, they would logically *support* the merger since those results could only benefit incumbent terrestrial broadcasters.¹⁴⁴

The NAB and individual broadcasters—in many other contexts—have repeatedly and unequivocally acknowledged that vigorous competition exists between satellite and terrestrial radio.¹⁴⁵ The NAB, despite what it now says, has stated historically that there have been

XM merger is for no other reason than to stifle and emerging technology that directly challenges ‘conventional radio.’”); Brief Comments of Robert Blackman (filed June 19, 2007) (“[T]he strong objections made by the NAB fully make the case for the increased competition in the marketplace, completely debunking the ‘monopoly’ argument.”); Public Knowledge at 15 (“The NAB’s aggressive opposition to satellite radio over the last decade is compelling evidence that the two audio entertainment services are, in fact, direct competitors.”).

¹⁴³ *Hospital Corp. of America v. FTC*, 807 F.2d 1381, 1391-92 (7th Cir. 1986) (“Hospital Corporation’s most telling point is that the impetus for the Commission’s complaint came from a competitor.”); *see also* CRA Competitive Effects Analysis at 72-73 (¶ 146).

¹⁴⁴ As Judge Posner explains in *Hospital Corp.*, a case involving the disputed purchase of a hospital, “[t]he hospital that complained to the Commission must have thought that the acquisitions would lead to lower rather than higher prices—which would benefit consumers, and hence, under contemporary principles of antitrust law, would support the view that the acquisitions were lawful.” *Hospital Corp.*, 807 F.2d at 1392.

¹⁴⁵ Indeed, when satellite radio service rules were first adopted in 1997, the NAB acknowledged “the potential adverse impact [of satellite radio] on terrestrial broadcasters.”

“dramatic increases” in the competition among audio services in recent years.¹⁴⁶ The NAB further has noted that in addition to competition from satellite radio providers, local radio stations “compete for listeners with other forms of audio delivery offering an almost unlimited array of content,” including “iPods and other MP3 players, music download services, podcasting and the Internet streaming of U.S. and foreign radio stations.”¹⁴⁷

Similarly, individual broadcasters routinely and in many other contexts acknowledge the competition they face from satellite radio and other audio platforms. For example, according to

Satellite Radio Authorization Order, 12 FCC Rcd at 5788 (¶ 83). As a number of commenters have pointed out, the broadcast industry has inconsistently argued in the media ownership proceeding currently pending before the FCC that the marketplace for audio services should be defined broadly and is highly diverse and competitive. See, e.g., *Common Cause* at 11-12; *Public Knowledge* at 12.

One of the NAB’s consultants, Carmel Group, has offered inconsistent views on radio competition as well. The Carmel Group’s Jimmy Schaeffler, who claims the instant transaction would be anti-competitive because satellite radio does not compete with terrestrial radio and other audio entertainment options, see Jimmy Schaeffler, *The Carmel Group, Higher Prices, Less Content and a Monopoly: Good for the Consumer?* (Apr. 2007), reached the opposite conclusion last year. See Jimmy Schaeffler, *The Carmel Group, Growing Another Telecom Pie: Satellite Radio's In-Vehicle Competition*, http://carmelgroup.com/publications/document/growing_another_telecom_pie/ (last visited July 17, 2007) (“[T]oday[,] the U.S. is pitched in a new battle over the same kind of telecom development, where again, the pie grows and numerous competitors thrive, side-by-side. In this case, the new player is satellite radio, with more than seven mil. subscribers, and its competition comes in the form of traditional analog AM & FM radio, as well as burgeoning services like MP3 players, terrestrial radio, and video- and Internet-to-the-vehicle.”).

¹⁴⁶ Reply Comments of the National Association of Broadcasters, MB Docket No. 06-121, 32 (filed Jan. 16, 2007).

¹⁴⁷ Comments of the National Association of Broadcasters, MB Docket No. 06-121, 26 (filed Oct. 23, 2006). The NAB further noted that “[t]he iPod alone—with sales recently passing 50 million units—has revolutionized the portable media market. . . . [T]he iPod is responsible for a remarkable shift in media priorities, as networks, music companies, and independent producers scramble to make their content available for digital download. Sales of the iPod promise to increase with the recent announcement that General Motors and Ford plan to integrate iPods into their new car audio systems, creating another direct competitor to local radio for listeners.” *Id.* at 15.

Clear Channel, “[s]atellite radio is . . . [a] substantial . . . competitor to terrestrial radio broadcasting.”¹⁴⁸ Clear Channel also noted that “free, over-the-air radio also now faces substantial and ever-increasing competition from a dizzying array of alternative platforms. A decade ago, Congress could not even have imagined the emergence of many of these platforms, several of which were only on the horizon in 2003.”¹⁴⁹ Clear Channel further argued that “[t]errestrial radio operators are but one small set of participants in the overall media landscape, which has expanded dramatically in recent years. . . . Within this vast and constantly-expanding media marketplace, terrestrial radio broadcasters are subject to fresh and ever-growing competition from a vast array of new technologies and services that deliver music, entertainment, and news.”¹⁵⁰

Radio One, Inc. has also acknowledged that it competes with satellite radio: “The radio broadcasting industry is highly competitive. Radio One’s stations compete for audiences and advertising revenue with other radio stations and with other media such as . . . the Internet [and] satellite radio.”¹⁵¹ The Spanish Broadcasting System stated that “[o]ur broadcasting businesses

¹⁴⁸ Comments of Clear Channel Communications, Inc., MB Docket No. 06-121, 13 (filed Oct. 23, 2006). Clear Channel also noted the substantial competition from MP3 players, Internet radio, subscription-based music services offered via cable, DBS, and IPTV networks. *Id.* at 13, 15, 16-17 (“Recent estimates indicate that 28% of Americans over the age of 12—or nearly sixty-seven million—own MP3 players, more than double the number in 2005 Internet radio is also a significant competitor to traditional radio broadcasting Subscription-based music services offered via cable and DBS—and the new ‘IPTV’ networks being installed by traditional telephone companies—also compete with free, over-the-air radio.”).

¹⁴⁹ *Id.* at i.

¹⁵⁰ *Id.* at 10.

¹⁵¹ Radio One, Inc., 2006 SEC Form 10-K at 12 (filed June 14, 2007). *See also, e.g.*, CBS Corp., 2006 SEC Form 10-K at I-10–I-11 (filed Mar. 1, 2007) (“The radio industry is also subject to competition from two satellite-delivered audio programming services, Sirius Satellite Radio and XM Satellite Radio. . . . The Company’s radio stations face increasing competition from

face increasing competition from new broadcast technologies, such as broadband wireless and satellite television and radio, and new consumer products, such as portable digital audio players and personal digital video recorders. These new technologies and alternative media platforms compete with our radio and television stations for audience share and advertising revenue.”¹⁵²

The terrestrial broadcasters correctly characterize the competitive landscape in their earlier filings and public statements. These views are no less true in this proceeding. The anxiety they express, that a merged satellite radio company will have a “substantial competitive advantage,” is compelling evidence that, at a minimum, terrestrial radio belongs in the same

audio programming delivered via the Internet and from consumer products such as portable digital audio players.”); Beasley Broadcast Group, Inc., 2006 SEC Form 10-K at 17 (filed Mar. 12, 2007) (“Competition arising from other technologies or regulatory change may have an adverse effect on the radio broadcasting industry or on our company. Various other audio technologies and services that have been developed and introduced, include: satellite delivered digital audio radio services that offer numerous programming channels and the sound quality of compact disks.”); Entercom Communications Corp., 2006 SEC Form 10-K at 13 (filed Feb. 28, 2007) (“There is increased competition for audio distribution. These technologies and services . . . include . . . satellite delivered digital audio radio service, which has resulted in subscriber-based satellite radio services with numerous niche formats . . . personal digital audio services (e.g., audio via WiFi, mobile phones, iPods® and mp3® players); digital radio, which provides multi-channel, multi-format digital radio services in the same bandwidth currently occupied by traditional AM and FM radio services.”).

¹⁵² Spanish Broadcasting System Inc., 2006 SEC Form 10-K at 30 (filed Mar. 16, 2007). *See also* Entravision Communications Corporation, 2006 SEC Form 10-K at 15 (filed Mar. 15, 2007) (“The radio industry is subject to competition from new media technologies that are being developed or introduced, such as . . . satellite-delivered digital audio services with CD-quality sound—with both commercial-free and lower commercial load channels—which have expanded their subscriber base and recently have introduced dedicated Spanish-language channels (for example, XM Satellite Radio now provides four Spanish-language channels, all commercial-free, and Sirius Satellite Radio provides three Spanish-language channels.”); Univision Communications Inc., 2006 SEC Form 10-K at 15 (filed Feb. 9, 2007) (“the radio broadcasting industry is subject to competition from new media technologies that are being developed or introduced such as (1) satellite-delivered digital audio radio service, which has resulted in the introduction of new subscriber based satellite radio services with numerous niche formats”).

relevant market as satellite radio.¹⁵³ And the effects identified by broadcasters “sound more like *the consequences of an aggressive and more efficient satellite radio competitor offering a lower price to attract current AM/FM customers, not like a monopolist restricting its output and raising its subscription price.*”¹⁵⁴

In short, the evidence clearly demonstrates that satellite radio competes in a highly competitive audio entertainment market, which includes many robust and substitutable services. This competition is confirmed anecdotally by consumers and objectively by available economic measures. In addition, when it serves their interests, the NAB and its members have consistently identified the larger audio market as the one in which they (quite successfully) compete, demonstrating the presence of a larger audio entertainment market.

B. Satellite Radio Has a Very Small Share of the Market Compared to Terrestrial Radio and Other Audio Entertainment Services.

An evaluation of market share serves as a reasonable initial assessment to determine whether a merger will lead to the exercise of market power. When the market is properly understood to include a range of competitors including terrestrial radio and other audio entertainment services, it becomes clear that XM and Sirius have a very low combined market share—well within the safe harbors provided by the Horizontal Merger Guidelines¹⁵⁵—and that the proposed merger will not lead to any anticompetitive harm. To the contrary, the facts demonstrate that this merger will be good for consumers.

¹⁵³ 46 Broadcasters at 5.

¹⁵⁴ CRA Competitive Effects Analysis at 74 (¶ 148).

¹⁵⁵ See Horizontal Merger Guidelines at § 1.51 (“Mergers producing an increase in the HHI of less than 50 points, even in highly concentrated markets post-merger, are unlikely to have adverse competitive consequences and ordinarily require no further analysis.”).

CRA explains that “[t]here are a number of reasonable ways to measure the shares of *satellite radio and other services in the market for audio entertainment devices*,” including “(1) total time spent listening by consumers; (2) revenue earned; (3) the number of owners or subscribers; and (4) the number of listeners or users.”¹⁵⁶ They find a “strikingly consistent” pattern for “all the measures and estimates”: the combined share of Sirius and XM ranges from [[REDACTED]] percent, with a “negligible change in market concentration” as a result of the merger.¹⁵⁷

Even if the market were erroneously limited to satellite radio and terrestrial radio, CRA concludes that “the merger would not raise competitive concerns” because “the combined market shares of Sirius and XM remain small, ranging from [[REDACTED]], depending on the measure and estimate of shares. . . . All of these shares lead to an estimated change in HHI of less than 50 points.”¹⁵⁸ These extremely low market shares demonstrate that the merger of Sirius and XM does not pose competitive concerns. In order to maintain or grow its position in the vigorously competitive market for audio entertainment services, the merged entity will need to continue providing high-quality services and developing new products and services.

Several commenters arrive at much higher market concentration figures for Sirius and XM, either by (1) erroneously excluding terrestrial radio and all other audio entertainment services from the market definition,¹⁵⁹ or (2) calculating market shares based on capacity, *i.e.*,

¹⁵⁶ CRA Competitive Effects Analysis at 50 (¶ 91).

¹⁵⁷ *Id.* at 50 (¶ 92) (finding that HHI, a standard measure of market concentration, increases no more than [[REDACTED]]).

¹⁵⁸ *Id.* at 50-51 (¶ 93).

¹⁵⁹ *See, e.g.*, NAB Coalition at 7; NAB at 23-24.

the number of channels of each participant, rather than one of the methods described above.¹⁶⁰

*However, as CRA explains, the use of capacity as a measure of market share is typically limited to “homogenous products, like steel, in which price is the main focus of competition. It is not appropriate for differentiated products like audio entertainment. When products are differentiated, market shares based on revenues or other measures of output are more appropriate than capacity measures.”*¹⁶¹

For over a decade, terrestrial radio broadcasters and their trade association have opposed satellite radio. Indeed, the broadcasters’ adamant opposition to this merger is simply the latest installment in a decades-long effort to impede or forestall the growth of competitors such as satellite radio.¹⁶² It is obvious why the broadcasters have adopted this strategy: as the NAB

¹⁶⁰ See, e.g., Sidak Mar. 16 Decl. at 36-41 (¶¶ 61-67). Mr. Sidak appears to have abandoned this approach in his Supplemental Declaration, considering that he makes no mention of it. See generally Sidak July 9 Supp. Decl. Nevertheless, other commenters rely upon his approach in opposing the merger. See, e.g., NAB at 26 (“[I]n even the largest urban markets, all of the local radio stations added together do not equal the channel capacity of even one of the two satellite radio systems to be merged.”); Common Cause at 29 (“If one conducts the analysis of market structure on the basis of channel capacity because of the differences in technology, this merger is unambiguously anticompetitive.”).

¹⁶¹ CRA Competitive Effects Analysis at 51 (¶ 95) (citing Horizontal Merger Guidelines at § 1.41).

¹⁶² See, e.g., Response of the National Association of Broadcasters to Digital Satellite Broadcasting Corporation’s Opposition to Petitions to Deny and Response to Comments, file Nos. 28-DSS-LA-93, 12/13-DSS-P-93, 3 (filed June 25, 1993) (“NAB Response to DSBC Opposition”) (indicating that satellite radio would “siphon” listeners away from terrestrial radio); Reply Comments of the National Association of Broadcasters, IB Docket No. 95-91, 34-35 (filed Oct. 13, 1995) (asserting that “[o]ne way that the Commission can act to minimize the harmful effects of satellite [radio] introduction is to structure it as a subscription-only service” and “[w]hether it is advertising-supported or not, satellite [radio] providers fundamentally will compete with terrestrial broadcasters for listeners”); Reply Comments of the National Association of Broadcasters, MB Docket No. 04-160, 15-16 (filed June 21, 2004) (“What was true in 1995 is still true today—if [satellite radio] is allowed to penetrate the local market, local broadcasting, and the voice of the community it provides, will suffer.”).

itself candidly admitted nearly 15 years ago, they fear that satellite radio will “siphon off listeners” from terrestrial radio.¹⁶³ But while some “siphoning” of listeners—also known as “competition”—has occurred to some extent since satellite radio was launched in 2001, terrestrial broadcasting continues to dwarf satellite radio and all other forms of audio entertainment.

Despite the NAB’s attempt to conceal its request for regulatory protectionism in antitrust clothing, it is well-established that the antitrust laws “were enacted for ‘the protection of competition, not competitors.’”¹⁶⁴ As Professor Hazlett explains, “[w]hile the terrestrial radio broadcasters dress their opposition in the rubric of antitrust law, their strategy to prevent this efficient restructuring by obtaining regulatory intervention is an attempt to use antitrust law to subvert competition.”¹⁶⁵

By any reasonable measure, free “over-the-air” AM/FM radio maintains a far greater share of the audio entertainment marketplace in comparison to satellite radio:

- *Time Spent Listening.* According to a recent Arbitron study, satellite radio accounted for just 3.4 percent of all radio listening, spread out among the approximately 300 channels that XM and Sirius combined currently offer.¹⁶⁶
- *Revenue.* As noted in Professor Hazlett’s study, “terrestrial broadcasters accounted for over \$21 billion in sales in 2006, as compared to just \$1.6 billion

¹⁶³ NAB Response to DSBC Opposition at 3.

¹⁶⁴ *Brunswick Corp. v. Pueblo Bowl-O-Mat*, 429 U.S. 477, 488 (1977) (quoting *Brown Shoe*, 370 U.S. at 320).

¹⁶⁵ Hazlett at 3.

¹⁶⁶ Phil Rosenthal, *Satellite Deal Foes Don’t Hear Message*, CHICAGO TRIBUNE, Feb. 28, 2007, <http://tinyurl.com/26awbt> (last visited July 20, 2007) (summarizing the results of the Arbitron study); see also The Katz Radio Group, *Satellite Radio Penetration*, RADIOWAVES, Dec. 2006, <http://www.katz-media.com/pubs/RadioWaves/121206/RadioWavesDEC2006.pdf> (last visited Mar. 17, 2007) (finding that satellite radio constituted 4.1 percent of the market).

for satellite—less than 7% of overall radio revenues.”¹⁶⁷ In light of these revenue figures, it should hardly be surprising that “investors place an enterprise value of about \$82 billion on terrestrial stations, as against about \$9 billion for satellite radio.”¹⁶⁸

- *Number of Subscribers/Listeners.* XM and Sirius combined had approximately 14 million subscribers as of December 31, 2006, and this number is expected to grow to 25 million by the beginning of 2010.¹⁶⁹ By contrast, Internet radio has 72 million monthly listeners,¹⁷⁰ more than 116 million MP3 players have been sold (expected to grow to 341 million by the beginning of 2009),¹⁷¹ 23.5 million wireless subscribers own phones with integrated music players,¹⁷² and \$11.2 billion was spent on compact discs in 2005.¹⁷³ All of these numbers do not compare, however, to the 230 million people who listen to AM/FM radio every week.¹⁷⁴

¹⁶⁷ Hazlett at 4.

¹⁶⁸ *Id.*

¹⁶⁹ Bridge Ratings, *Digital Media Growth Projections*, Feb. 19, 2007, http://www.bridgeratings.com/press_021907-digitalprojectionsupd.htm (last visited Mar. 15, 2007). See also Credit Suisse, *2007 Satellite Radio Outlook*, Jan. 16, 2007, at 7 (projecting 25.5 million subscribers by the end of 2009 and 28.9 million by the end of 2010); Stifel Nicolaus, *Satellite Radio Merger Attempt Likely, Based on History & Risk/Reward*, Nov. 27, 2006, at 10, 12 (projecting 27.0 million subscribers by the end of 2009 and 31.7 million subscribers by the end of 2010).

¹⁷⁰ See Bridge Ratings, *Digital Media Growth Projections*.

¹⁷¹ *Id.*

¹⁷² This is five times the number of Americans that owned such phones in 2005. Bridge Ratings, *Music on Cell Phones*, Jan. 25, 2007, http://www.bridgeratings.com/press_01.25.2007-MusicCellphones.htm (last visited Mar. 13, 2007).

¹⁷³ Jupiter Research, *US Music Forecast, 2006 to 2011*, Jan. 4, 2007 (Executive Summary), <http://www.jupiterresearch.com/bin/item.pl/events:jupitertel/jup/id=98643/> (last visited Mar. 13, 2007).

¹⁷⁴ See Arbitron, *Radio Today: How America Listens to Radio*, 2006 Edition, at 2, <http://www.arbitron.com/downloads/radiotoday06.pdf> (last visited Mar. 19, 2007) (estimating that 93 percent of Americans twelve years old and over listen to radio each week); *The 2007 Statistical Abstract*, The National Data Book, U.S. Census Bureau, at Table 11, <http://www.census.gov/compendia/statab/population/> (estimating 2005 resident population by age). According to another report, this number is even higher. See Bridge Ratings, *Digital Media Growth Projections*, Feb. 19, 2007, at http://www.bridgeratings.com/press_021907-

The NAB has, in fact, repeatedly touted terrestrial radio's market dominance. When addressing the NAB Radio Show in September 2006, NAB President and CEO David Rehr announced that

Many, even in our industry, forget that radio has always experienced change—and challenges—from new competitors. And radio has always come out on top. . . . First it was TV, then LP's, then cassette tapes—then my favorite—eight-tracks—then CD's—now it's I-PODS. But each time, radio has prevailed. And today is no different. In 2006, we have satellite and Internet radio. *And barely a day passes without the introduction of a new competing device or service. But we have news for our competitors: 'We will beat you—as we have beaten those change agents in the past.'* . . . *And when people ask us are you focused on satellite radio because you're afraid of the competition—we say, 'No.'* Satellite radio says it has at most 10 million subscribers, notwithstanding those 500,000 subscribers in empty car lots. But 260 million people listened to broadcast radio last week alone!¹⁷⁵

As these figures indicate, satellite radio is a relatively small competitor in comparison to terrestrial radio and other audio entertainment services and lacks the ability or incentive to demand prices in excess of those expected from a competitive market.¹⁷⁶ Indeed, many

digitalprojectionsupd.htm (last visited July 22, 2007) (estimating 282 million weekly radio listeners). Even the NAB acknowledges terrestrial radio's dominance. See David Rehr, President and CEO, NAB, Remarks at the National Press Club: The Future of Broadcasting (Oct. 4, 2006),

http://www.nab.org/AM/Template.cfm?Section=News_room&TEMPLATE=/CM/ContentDisplay.cfm&CONTENTID=6937 (last visited Mar. 17, 2007) (“Satellite radio says it has at most 12 million subscribers. By contrast, 260 million people listened to local radio last week. This is week in and week out.”).

¹⁷⁵ David K. Rehr, President & CEO, NAB, Speech at the 2006 NAB Radio Show, Sept. 21, 2006,

http://www.nab.org/AM/Template.cfm?Section=Press_Releases1&CONTENTID=6802&TEMPLATE=/CM/ContentDisplay.cfm (last visited July 23, 2007) (emphasis added); see also NAB, *Media Ownership*,

<http://www.nab.org/AM/Template.cfm?Section=Resources&TEMPLATE=/CM/ContentDisplay.cfm&CONTENTID=7889> (last visited July 23, 2007) (relying on “dramatic changes in the media marketplace, including the growth of cable TV, satellite TV and radio, and the Internet”).

¹⁷⁶ Application at 20-45.

commenters indicate that if satellite radio gets too expensive or changes its programming in a way that consumers do not like, they will simply cancel their service, returning to terrestrial radio and other forms of audio entertainment.¹⁷⁷

C. Opponents' Arguments for a Separate and Distinct Satellite Radio Market Are Flawed.

Opponents argue that satellite radio must be considered a distinct market because there are no alternatives that offer all of the attributes of satellite radio in a single package.¹⁷⁸ As CRA correctly states, however, satellite radio, terrestrial radio, iPods and other MP3 players, wireless phones, and Internet radio "are differentiated along various dimensions, but they nonetheless compete."¹⁷⁹ And, in any event, *perfect* substitution is not required for two products to be part of the same market.¹⁸⁰

For example, some opponents suggest that satellite and terrestrial radio are in different

¹⁷⁷ See, e.g., Brief Comments of Jeremy Dobson (filed June 15, 2007) ("If they started charging too much, I would simply cancel my subscription and return . . . to the . . . world of broadcasted terrestrial radio."); Brief Comments of David J. Willard (filed May 23, 2007) ("In the unlikely event that we should end up disliking the 'new' satellite radio's service (policies, customer satisfaction and . . . OH, prices!) then we simply cancel service."); Brief Comments of Alan Huntington (filed June 15, 2007) (post-merger the "price will remain low because the majority of people have a strictly limited value which they place on the time gained through not listening to commercials").

¹⁷⁸ See, e.g., Letter from Larry Walke, NAB, to Marlene H. Dortch, FCC, MB Docket No. 07-57 (filed Apr. 24, 2007) (attaching *The XM-Sirius Merger: Monopoly or Competition from New Technologies Before the Subcommittee on Antitrust, Competition Policy and Consumer Rights of the Senate Committee on the Judiciary*, 110 Cong. (Mar. 20, 2007) (statement of David A. Balto) ("Balto Testimony")).

¹⁷⁹ CRA Competitive Effects Analysis at 3 (¶ 5).

¹⁸⁰ If this were not the case, Sirius and XM would be considered to belong to separate product markets since there is significant product differentiation between the two companies with regard to programming and distribution. See *id.* at 30-34 (¶¶ 50-58).

markets because one relies on subscriber revenue while the other relies on advertising revenue.¹⁸¹

Some state that listeners dislike advertising and that satellite radio is virtually commercial-free.¹⁸² Some argue that satellite radio is in a different market from terrestrial radio because satellite radio offers a large number of channels.¹⁸³ Some allege that satellite radio is differentiated by higher sound quality.¹⁸⁴ And some say that satellite radio, unlike iPods and other MP3 players, does not require consumer programming.¹⁸⁵

However, as persuasively shown by CRA, all these arguments and observations are completely unavailing:

- As CRA states, “the use of different ‘business models’ does not imply the absence of listener substitution between terrestrial radio and satellite radio.”¹⁸⁶ Listeners do not sort out available alternatives according to business models, and, as shown above, listeners clearly substitute between terrestrial and satellite radio.

¹⁸¹ See, e.g., NAB Coalition at 6; Common Cause at 16.

¹⁸² See, e.g., NAB Coalition at 5.

¹⁸³ See, e.g., NAB Coalition at 5; Common Cause at 17.

¹⁸⁴ See, e.g., NAB Coalition at 11-12; Blue Skies at 6.

¹⁸⁵ See, e.g., Common Cause at 18.

¹⁸⁶ CRA Competitive Effects Analysis at 34 (¶ 60). Opponents point to Mr. Sidak’s conclusion that there exists a “satellite-only” product market, but Mr. Sidak’s statement is flawed. First, his “critical elasticity” test ignores the fact that satellite is still a growing competitor. See Hazlett at 32. In order to become profitable over the long run, satellite radio must attract many new subscribers from the great majority of Americans who listen to alternative audio platforms. Second, he improperly indicates that satellite radio is a separate market because it offers adult-themed programming. Satellite radio is not the exclusive source for adult-themed programming. Terrestrial broadcasters have the ability to broadcast adult-themed programming at certain times and, indeed, spend extensive resources exercising their right to do so. In addition, adult-themed programming is widely available on a variety of other platforms, including the Internet. Finally, even if Mr. Sidak’s statement that only satellite radio offers adult-themed programming were true, it would not mean that satellite radio constitutes a separate market. Instead, adult-themed programming simply would represent a part of the differentiation among products in any market.

- While the relative lack of advertising may be important to many satellite subscribers,¹⁸⁷ a large majority of radio listeners clearly do not value it enough to pay for satellite radio.¹⁸⁸
- For some consumers, the availability of a relatively large number of channels is advantageous. [[REDACTED]]¹⁸⁹
- As for sound quality, consumers can get sound quality superior to FM and AM from a variety of devices, such as CD players, MP3 players, and wireless phones. And, of course, HD Radio provides higher quality sound than standard terrestrial broadcast radio. [[REDACTED]]¹⁹⁰

Opponents also ignore the competitive disadvantages that Sirius and XM face, relative to terrestrial broadcasters. In particular, satellite radio is only available for a monthly subscription fee; terrestrial radio is available for *free*. Satellite radio is only available with specialized equipment and is standard equipment on relatively few vehicle models. But virtually *every* new and existing automobile in the United States is equipped with an AM/FM radio.

¹⁸⁷ Of course, not all satellite radio programming is commercial free, and not all terrestrial radio programming is advertiser supported.

¹⁸⁸ CRA Competitive Effects Analysis at 36-37 (¶ 63). In particular, Mr. Sidak expends much effort arguing essentially that terrestrial broadcasting is inferior because listeners pay a “cost” for “enduring” advertisements on commercial AM/FM. Sidak Mar. 16 Decl. at 26 (¶ 43); Sidak July 9 Supp. Decl. at 28-30 (¶¶ 42-44). In fact, Mr. Sidak tries to quantify this broadcast consumer cost by using average wage rates, but this analytic approach leads to illogical results. Taking Mr. Sidak’s analysis, for someone earning \$10 an hour, the cost of enduring broadcast radio commercials would be about \$55 a month. Since satellite radio costs only \$12.95 a month, the analysis suggests that rational consumers would opt for “lower cost” satellite radio. Clearly, however, this is not the market reality: about 230 million Americans listen to terrestrial radio each week, and only about 14 million Americans are satellite radio subscribers. *See* CRA Competitive Effects Analysis at 36, n.131 (¶ 63).

¹⁸⁹ CRA Competitive Effects Analysis at 38-39 (¶ 67).

¹⁹⁰ *Id.* at 37-38 (¶ 65).

Some opponents claim that the Horizontal Merger Guidelines' so-called "SSNIP" test¹⁹¹ leads to the conclusion that satellite radio is a unique market.¹⁹² As CRA explains, the SSNIP test can sometimes be an effective tool to identify reasonable substitutes that will constrain pricing in the market—particularly in mature, and relatively static, industries.¹⁹³ But as many economists have observed, the SSNIP test produces erroneous results when "it is not applied within a consistent economic framework."¹⁹⁴ Opponents offer a cursory application of the SSNIP test and use short-term profitability as the measuring point, but "this approach does not accurately capture the significance of demand substitution for the profitability of a price increase by the merged firm in this case."¹⁹⁵ Satellite radio is a relatively young and growing business, and there are other complex market factors, including the "dynamic demand" spillovers discussed by CRA and summarized above.¹⁹⁶ The traditional short-run SSNIP test and the associated static "critical loss" test, which are commonly used in evaluating mature industries and which the opponents attempt to apply here, simply fail to produce economically meaningful results in these circumstances. If the SSNIP test is to be employed at all, it must "focus on the

¹⁹¹ See Horizontal Merger Guidelines at § 1.11. This is an acronym for a "small but significant and nontransitory increase in price" and attempts to assess whether a hypothetical monopolist that sells a product or group of products could profitably impose a price increase. If the increase would be profitable, then, it is said, the products provided by the hypothetical monopolist make up a distinct product market.

¹⁹² See, e.g., Sidak Mar. 16 Decl. at 9-10 (¶ 18).

¹⁹³ CRA Competitive Effects Analysis at 43-44 (¶ 76).

¹⁹⁴ *Id.* at 43-44, n.167 (¶ 76) (listing several recent articles that have raised questions about the usefulness of the SSNIP test).

¹⁹⁵ *Id.* at 43-44 (¶ 76).

¹⁹⁶ See *supra* Section II.E.

longer-term effects of a higher price on buyer behavior and seller profitability”¹⁹⁷ and must also account for the incentive of Sirius and XM to engage in a penetration pricing strategy. In short, opponents gain nothing by attempting a perfunctory application of the SSNIP test using short-term profitability, without acknowledging the unique attributes that shape this economic landscape.

D. Technology Has Dramatically Changed Audio Entertainment Since Satellite Radio First Was Introduced, and the Market Continues to Change Dramatically.

Some commenters attempt to convince the Commission that the audio entertainment market is essentially the land that time forgot—that it has remained static since the agency first authorized satellite radio services ten years ago.¹⁹⁸ In particular, the NAB Coalition makes much of the fact that terrestrial radio and other services, such as CD players, existed in 1997.¹⁹⁹ In light of the revolutionary changes that have taken place in the audio entertainment industry over the past ten years, these arguments simply do not wash.

It may be that no one ten years ago contemplated the level of competition that has evolved and intensified. Former FCC Chairman Reed Hundt was recently quoted as saying that, when the Commission licensed satellite radio in 1997, “it wasn’t clear that satellite radio would compete with local terrestrial radio. . . . But now it is quite clear that satellite radio and terrestrial

¹⁹⁷ CRA Competitive Effects Analysis at 44 (¶ 78).

¹⁹⁸ See, e.g., NAB Coalition at 5-6 (“Ten years ago, when the Commission authorized [satellite radio], the marketplace was replete with consumer-electronic options for the enjoyment of audio entertainment. Pre-recorded media on cassettes and CDs was ready available to consumers for use in the home, in cars, and in portable devices.”).

¹⁹⁹ *Id.*

radio do, in fact, compete.”²⁰⁰ And it is clear, too, as broadcasters have historically acknowledged, that both satellite and terrestrial radio compete with numerous other audio platforms. The evolution that has occurred in the audio entertainment market in recent years has been breathtaking, as the companies demonstrated in their Application.²⁰¹ The changes that have occurred even since that filing was submitted just months ago are illustrative of the incredible pace at which this market is advancing. Indeed, it seems that hardly a day goes by without at least one company offering a product that will provide consumers with greater access to audio entertainment. Such product offerings run the gamut from simple tabletop HD radios to iPhones to wireless phones that store as much music (and video) as some conventional multimedia players. Outlined below are just a few of the most recent notable developments:

- *HD Radio.* HD Radio’s presence in the marketplace continues to grow rapidly.²⁰² The HD Digital Radio Alliance has committed \$250 million in airtime to promote HD Radio in 2007 alone, and HD side channels increasingly support new and experimental formats.²⁰³ At the end of March, the Commission adopted rules designed to facilitate the expansion and availability of HD Radio as a competitor.²⁰⁴ The rules establish minimal baseline requirements, giving radio stations broad flexibility to experiment with new digital services. Moreover, since the parties filed the Application, prices on HD Radios also have continued

²⁰⁰ Joe Nocera, *Talking Business: I Want My Howard Stern and Oprah*, N.Y. TIMES, Jan. 20, 2007, at C1.

²⁰¹ Application at 21-39.

²⁰² See, e.g., Sam Diaz, *HD Radio Grabs the Ear of Satellite Rivals*, WASHINGTON POST, July 3, 2007, at D04 (“HD [Radio] is gaining ground.”). See also CRA Competitive Effects Analysis at 19 (¶ 32) (noting that “the approximately 1350 HD Radio stations broadcasting in digital cover 82% of the U.S. population” and that “[o]ver 3,000 HD Radio stations are predicted to be in operation in the next few years and iBiquity forecasts 5700 channels by 2011.”).

²⁰³ See, e.g., FMQB, *HD Digital Radio Alliance Launches 264 New Channels*, Jan. 18, 2006, <http://fmqb.com/Article.asp?id=165202> (last visited July 20, 2007).

²⁰⁴ *Digital Audio Broad. Sys. Order* at ¶ 1.

to fall as an increasing number of manufacturers deploy their radios in stores.²⁰⁵

- *Internet Radio.* Underlying much of the technological evolution is the proliferation of wireless Internet access.²⁰⁶ Today, consumers can access content via the Internet wherever they are, including in cars—and many more truly mobile Internet solutions are right around the corner.²⁰⁷ To be sure, traditional broadcasters, who have been losing listeners to other audio platforms, are aware of the appeal of Internet radio and its spread to portable devices and are making forays into the medium. In fact, as was reported in June, websites from Clear Channel now account for 20 percent of all online radio listening.²⁰⁸

²⁰⁵ For example, Sony debuted two HD radios in July 2007, both of which are currently available for pre-order. The first, XDR-S3HD, is a tabletop model that will sell for \$200. It comes equipped with a remote, alarm clock, and jack for a digital music player. The second, XT-100HD, is an external tuner for compatible Sony car stereos. It will retail for \$100. See Brian Lam, *Sony's First HD Radio: XDR-S3HD*, GIZMODO.COM, May 28, 2007, <http://gizmodo.com/gadgets/a-first/sonys-first-hd-radio-xdr%20s3hd-263953.php> (last visited July 16, 2007). Additionally, Radiosophy recently introduced a small tabletop HD radio (HD100) that it has promoted for as little as \$59. See Gary Krakow, *HD Radios Coming Down in Price*, MSNBC, June 1, 2007, <http://krakow.msnbc.msn.com/archive/2007/06/01/210973.aspx> (last visited July 16, 2007); Press Release, iBiquity Digital, "Moms, Dads and Grads" Rebate Offers \$40 Savings (Apr. 25, 2007), http://www.ibiquity.com/press_room/news_releases/2007/1020 (last visited July 20, 2007).

²⁰⁶ See, e.g., Press Release, Sprint Nextel, *Sprint Nextel and Clearwire to Partner to Accelerate and Expand the Deployment of the First Nationwide Mobile Broadband Network Using WiMAX Technology* (July 19, 2007), http://www2.sprint.com/mr/news_dtl.do?id=17520 (last visited July 20, 2007) (announcing that Sprint Nextel and Clearwire "plan to jointly construct the first nationwide mobile broadband network using WiMAX technology, and promote the global development of WiMAX-based services").

²⁰⁷ Autonet Mobile will begin selling a portable router that allows multiple users in a moving car to connect to the Internet. CRA Competitive Effects Analysis at 28-29 (¶ 46). See also, e.g., Press Release, Avis, *Rent from Avis and Get Your Own Mobile Wi-Fi Hotspot*, (May 21, 2007), http://www.autonetmobile.com/wp/wp-content/uploads/2007/05/avis_release_may07.pdf (last visited July 20, 2007); see also Dan Tynan, *Cruising the Internet at 70 MPH: Soon You'll Be Able to Surf the Web, Download Music, and Check E-Mail in Your Car*, PC WORLD, Mar. 21, 2007, <http://www.pcworld.com/printable/article/id,129779/printable.html> (last visited July 20, 2007). According to Tim Westergren, co-founder of Pandora, one of the most popular Internet radio services, "[i]t's just a matter of time before you can get Internet streams wherever you are." Jeff Leeds, *Big Radio Makes a Grab for Internet Listeners*, N.Y. TIMES, June 12, 2007, at B1.

²⁰⁸ Sarah McBride, *Going Wireless: Internet Radio Races to Break Free of the PC*, WSJ, June 18, 2007, at A1. And according to Arbitron Inc. and Edison Media Research, Internet radio

- *Internet Radio Players.* As was announced just days before the Application was filed, Slacker will soon be selling its Slacker Portable device. This product, which will be available to consumers this summer, will receive Slacker's Internet music stream by way of Wi-Fi and satellite service. Users will be able to get streaming Internet radio for free, with the only caveat being that the user only gets to skip six songs per channel per hour. However, an upcoming \$7.50 per month plan will allow the listener to expunge the ads and skipping limitations.²⁰⁹
- *Digital Music Services.* Additional digital music services also are being deployed. Recognizing the strong and growing consumer demand for online music, Lala.com, a Web site owned by Bain Capital LLC and several Silicon Valley investors, launched a service in June that provides for free the digital catalog of Warner Music Group and hundreds of smaller independent music companies. In return for getting the free music on their PC, consumers pay to buy the songs they want to take with them on their iPods or other digital media players. Prices range from \$6.50 to \$13.50 per album.²¹⁰
- *Digital Media Players.* As technologies converge and the cost of memory storage drops, technologically advanced digital media players are becoming more ubiquitous. Indeed, car manufacturers are regularly including iPod connections in many new vehicles.²¹¹ In addition, new models, which frequently are appearing

listenership in the U.S. has risen to 29 million people per week, which is up from 20 million three years ago. *Id.* See also CRA Competitive Effects Analysis at 12 (¶ 19).

²⁰⁹ The Slacker player, which features a 4-inch screen with scrolling touch strip, debuts this summer in varying capacities ranging from 2, 4, and 8GB up to 120GB for between \$150 and \$350. Slacker's satellite car kit will allow a user access to Slacker content via the Portable while on the move or if the user is out of range of Internet access. See Ryan Block, *Slacker: Music Device and Service Via Web, WiFi, and Satellite*, ENGADGET.COM, Mar. 14, 2007, <http://www.engadget.com/2007/03/14/slacker-music-device-and-service-via-internet-satellite/> (last visited July 16, 2007); Slacker, <http://www.slacker.com/company/products.html#portable> (last visited July 16, 2007). See also CRA Competitive Effects Analysis at 28 (¶ 45).

²¹⁰ Music is only sold by the album and not song by song. Lala works through a normal Web browser. Users can create and save playlists, send them to friends and browse virtual collections of other users for free. See GIZMODO.COM, *Every Song You Own, Available Online Wherever You Are For Free*, June 4, 2007, <http://gizmodo.com/gadgets/downloads/every-song-you-own-available-online-wherever-you-are-for-free-promises-lalacom-265879.php> (last visited July 16, 2007); Ethan Smith, *Listen to Music Free, But Pay to Carry*, WSJ, June 5, 2007, at B1. See also CRA Competitive Effects Analysis at 11 (¶ 19).

²¹¹ See Press Release, Apple, *Apple Teams Up With Ford, General Motors & Mazda To Deliver Seamless iPod Integration* (Aug. 3, 2006), <http://www.apple.com/pr/library/2006/aug/03ipod.html> (last visited July 20, 2007) (stating that more than 70% of 2007-model US automobiles will offer iPod integration). See also CRA

in the marketplace, include far more features and storage capacity than models issued just a year ago. As a result, consumers can now enjoy all types of content whenever and wherever they go, especially as Internet access becomes standard. By way of example, in April, SanDisk introduced its newest MP3 player, the Sansa Connect, which is Wi-Fi compatible and offers music, photos, and Internet radio (via a subscription to Yahoo's Music Unlimited To Go). It has 4 GB of storage capacity and currently sells for \$250.²¹²

- *Wireless Phones/Services/iPhone.* The development of wireless phones and services with music capabilities has exploded over the last several months, making audio entertainment services widely available on consumers' mobile phones today. As of April 2007, at least 7.1 million people on average listened to music on their mobile phones, representing a 25 percent increase over figures from January 2007.²¹³ And, in addition to Apple's iPhone, which was released at the end of June, other phone manufacturers have recently launched or will soon be launching new iterations of mobile phones that double as multimedia players. For example, Sprint Nextel and Samsung have teamed up to create their version of the iPhone.²¹⁴ Several new wireless music services also have been deployed in recent

Competitive Effects Analysis at 28 (¶ 44) (discussing the new joint Ford-Microsoft product called Sync, which allows music and wireless devices to instantly become integrated with the car).

²¹² See Stephen H. Wildstrom, *SanDisk's Slick Wi-Fi Music Player*, BUSINESS WEEK, Apr. 26, 2007, http://www.businessweek.com/technology/content/apr2007/tc20070426_839204.htm?sub=techmaven (last visited July 21, 2007). SanDisk is not alone. Other new options include: (1) TurboLinux's Wizpy MP3 (see Press Release, Turbolinux, Inc., *Content Downloader Tool to Download Video on wizpy* (June 27, 2007), <http://www.turbolinux.com/cgi-bin/newsrelease/index.cgi?date2=20070603133613&mode=syosai> (last visited July 22, 2007)); (2) Archos' recently debuted new line of portable media players (see GEN5, http://www.archos.com/products/gen_5/index.html?country=global&lang=en (last visited July 16, 2007)); and (3) Sony's new version 3.50 firmware update for its PlayStation Portable (see Charlie White, *Sony PSP Firmware Update Gives You Remote Play from PS3*, GIZMODO.COM, May 31, 2007, <http://gizmodo.com/gadgets/gadgets/sony-psp-firmware-update-gives-you-remote-play-from-ps3-264762.php> (last visited July 16, 2007)).

²¹³ Figures are monthly averages for the three-month period ending in April 2007. Jessica Vascellaro, *Air War: A Fight Over What You Can Do on a Cellphone*, WSJ, June 14, 2007, at A1.

²¹⁴ The UpStage went on sale in April and retails for \$100 (with a 2-year contract). Consumers can buy songs via Sprint's proprietary music service for 99 cents (in addition to a \$15 month subscription fee). The phone holds approximately 20 songs, but a larger memory capacity card can be purchased for \$40. See Mark Wilson, *Frankenreview: Sprint/Samsung UpStage*, GIZMODO.COM, Mar. 28, 2007, <http://gizmodo.com/gadgets/feature/frankenreview-sprintsamsung-upstage-247653.php> (last visited July 22, 2007). Additionally, Pandora, a popular

months.²¹⁵ And, of course, the audio content available on wireless phones includes much more than music alone—for instance, news, talk, and sports are also available.²¹⁶

All of the new technologies that have spurred these recent developments in the audio entertainment marketplace have occurred since the Commission authorized satellite radio in 1997. Since that time, the pace of innovation has accelerated, and no one can deny the disruptive impact of the new players in this market, including wireless Internet providers and high-capacity multimedia devices, or the competitive effect that they and other more traditional players will continue to have. This constant innovation has created a market that bears no resemblance to the market in 1997 and belies the stagnant characterizations offered by the NAB and others.

Internet radio service, will be partnering with Sprint Nextel to deliver its service to users of high-speed data phones for \$2.99 month. The phone will play Pandora through a car stereo using an adaptor. Sarah McBride, *Going Wireless: Internet Radio Races to Break Free of the PC*. Similarly, Verizon Wireless has announced that it will be releasing a phone later this summer that will provide this type of service as well. Leslie Cauley, *AT&T Eager to Wield its iWeapon*, USA TODAY, May 21, 2007, http://www.usatoday.com/tech/wireless/2007-05-21-at&t-iphone_N.htm (last visited July 22, 2007) (quoting Verizon Chief Operating Officer Denny Strigl).

²¹⁵ For example, Melodeo is now offering a free mobile service dubbed NuTsie (an anagram of iTunes) that allows users to stream songs from their iTunes playlists wirelessly to certain mobile phones. It works like customized Internet radio. The user sends Melodeo a copy of his iTunes master playlist and Melodeo matches up songs from its own database. After downloading the NuTsie software to one's phone, the user simply opens the program and begins listening to the songs. Edward C. Baig, *NuTsie May Stream iTunes Songs to Cellphone You Have*, USA TODAY, June 7, 2007, at B3. Similarly, QuickPlay Media, Inc. plans to launch a service this summer that allows BlackBerry users to download video content, such as music videos, to their devices. Jessica Vascellaro, *Air War: A Fight Over What You Can Do on a Cellphone* at A13. See also CRA Competitive Effects Analysis at 22-26 (¶ 39).

²¹⁶ See CRA Competitive Effects Analysis at 22-26 (¶ 39) (discussing the range of content available on wireless phones).

IV. CONTRARY TO OPPONENTS' ALLEGATIONS, THE TRANSACTION WILL NOT HARM COMPETITION.

A. Regardless of How the Market is Defined, the Proposed Transaction Cannot and Would Not Be Anti-Competitive.

The proposed transaction will ensure that satellite radio remains a strong competitor in the highly competitive audio entertainment market and will not result in competitive harm or anti-competitive effects. Indeed, even if an evaluation of market shares were to reveal evidence of market concentration, that would mean only that the Commission should proceed with a thorough analysis of the likely competitive effects of the merger.²¹⁷ Regardless of the market definition or concentration, this merger is not anti-competitive because the many available alternatives in the marketplace will prevent the combined firm from raising prices or restricting output. Put simply, because of the competition from other products and services, the merged entity would lose subscribers if it raised prices without also increasing the quality of its services.²¹⁸

Certain opponents suggest that other audio entertainment products and services will not constrain pricing because of the lack of substitutability between these products and satellite radio.²¹⁹ As discussed previously, CRA disputes this claim by identifying several data points

²¹⁷ See, e.g., *United States v. Baker Hughes, Inc.*, 908 F.2d 981, 984 (D.C. Cir. 1990).

²¹⁸ Even if the market definition were artificially confined to satellite radio, it would still be necessary to consider all reasonable substitutes when conducting the competitive effects analysis. As the CRA Competitive Effects Analysis explains, providers of other audio entertainment services "are uncommitted entrants who are defined as 'market participants' and assigned market shares in the evaluation of post-merger concentration, even if the market is described narrowly." CRA Competitive Effects Analysis at 49, n.185 (¶ 91) (citing Horizontal Merger Guidelines at § 1.32).

²¹⁹ See, e.g., NAB at 14, 17-18.

that confirm the substitutability among audio entertainment services.²²⁰ This data reveals strong *substitutability among audio entertainment services, and yet relatively low substitution between the two satellite radio providers. Even the American Antitrust Institute (“AAI”) admits that “terrestrial radio and other sources of audio entertainment services are substitutes for satellite radio for some people and some uses—and compete to some extent with satellite radio.”*²²¹

AAI, however, asserts that substitutability is not the sole consideration, arguing that there is no evidence that terrestrial radio or any other sources of audio entertainment constrain the pricing behavior of the satellite radio providers.²²² Even so, AAI acknowledges that “[a] degree of cross elasticity might be shown if the rate of satellite radio subscriptions is higher in markets with fewer terrestrial radio stations. On the other hand, if the rate of satellite subscriptions is geographically uniform throughout the country, this would tend to indicate little cross elasticity.”²²³

As discussed above, CRA took up that challenge. It conducted precisely the sort of substitution analysis posited by AAI—and found “a clear, relatively smooth inverse relationship between average satellite radio penetration and the number of AM/FM radio stations received.”²²⁴ In other words, “[s]atellite radio penetration [though still quite low] generally is

²²⁰ See *supra* Section III.A. (demonstrating that the proportion of time spent listening to terrestrial radio and other audio entertainment devices dropped dramatically after subscribing to satellite radio and that most former subscribers choose to receive audio entertainment through alternative audio entertainment options, not the alternative satellite radio provider).

²²¹ See AAI at 17.

²²² *Id.* at 21.

²²³ *Id.* at 21, n.68.

²²⁴ CRA Competitive Effects Analysis at 15 (¶ 27).

higher in geographic areas where there are fewer AM/FM stations,” demonstrating that “consumers view AM/FM radio and satellite radio as reasonably close substitutes.”²²⁵ As further support for that conclusion, CRA points to evidence that terrestrial radio and other intermodal competitors have “rapidly add[ed] new products and reposition[ed] the products they sell” in response to the competitive pressures that satellite radio and other innovative audio entertainment services have brought to bear.²²⁶

Several commenters point to the fact that in April 2005, XM raised its subscription prices by 30 percent, “with apparently little diminution in demand,” as evidence that demand for satellite radio services is inelastic.²²⁷ But as CRA notes, such arguments are defective because they fail to identify “an objective and appropriate benchmark for growth in the absence of the price increase. . . . Saying that the growth ‘continued at a rapid pace’ or even comparing the growth rate from the previous year as a benchmark could be misleading because growth rates change naturally over time.”²²⁸ CRA also observes that XM introduced Major League Baseball at about the same time and included Opie & Anthony and XM online within the regular subscription, both of which had previously required a premium payment.²²⁹ It is entirely

²²⁵ *Id.* at 15-16 (¶ 27).

²²⁶ *Id.* at 16 (¶ 29). For instance, “in response to the success of the commercial-free options available on satellite radio, some AM/FM stations have reduced” the length of their commercials. *Id.* at 17-18 (¶ 31). Terrestrial radio “also has responded to the superior sound and increased variety offered through satellite radio by introducing HD Radio, which involves digital broadcasts.” *Id.* at 18 (¶ 31). *See also supra* Section III. The claim of some opponents that rural customers may be harmed by the merger is false, as explained in Section IV.C. In fact, the merger will bring the same benefits to rural consumers as everyone else.

²²⁷ AAI at 19; *see also, e.g.*, Sidak Mar. 16 Decl. at 11-13 (¶ 22); NAB at 28.

²²⁸ CRA Competitive Effects Analysis at 44-45, n.170 (¶ 78).

²²⁹ *Id.*

plausible—indeed, likely—that subscriber growth would have been dramatically higher during that period had XM not raised its rates, which would debunk the claims of inelasticity.

Opponents argue that iPods and other MP3 players impose no constraints on satellite radio subscription prices because these devices do not offer listeners access to pre-programmed material.²³⁰ But, in fact, there are many online content providers that offer unlimited music downloads (many of which are free, such as podcasts), and some services even permit users to download new content at Wi-Fi hotspots.²³¹ Some of these services permit consumers to sample new music just as they would with preprogrammed content. The new Slacker service goes a step further: It “enables U.S. consumers to customize their own radio stations and listen to them wherever they happen to be.”²³² Portable devices that include integrated Wi-Fi are currently available²³³ and more are expected later this summer, including “an onboard Slacker DJ.”²³⁴ And Slacker Satellite Car Kits are expected by the end of the year that will “receive high-speed

²³⁰ See, e.g., NAB at 16 (“iPods and other MP3 players do not offer the kind of variety of pre-programmed or live material as satellite [radio].”); Common Cause at 33 (“[T]he iPod would ‘not have the selection of XM, not the sophistication of the DJ mixes the radio at XM provides, not the new music that XM can introduce to the listener.’”) (quoting Balto Testimony at 6).

²³¹ See CRA Competitive Effects Analysis at 26 (¶ 41); see also, e.g., iPhoneHacks.com, *SeeqPod brings internet streaming music to iPhone*, <http://www.iphonehacks.com/2007/07/iphoneseeqpod.html> (last visited July 18, 2007).

²³² See Press Release, Slacker, *Slacker Introduces Personalized Radio Everywhere* (Mar. 15, 2007), http://www.slacker.com/dwls/031507_slacker_launch.pdf (last visited July 22, 2007).

²³³ See *supra* at 60-61 (describing the Sandisk Sansa Connect Wi-Fi enabled MP3 player).

²³⁴ See Slacker, *Slacker Introduces Personalized Radio Everywhere*. See also Michael Arrington, *Prototype of Pandora WiFi Device Shown Tonight in San Francisco*, TECHCRUNCH, May 23, 2007, <http://www.techcrunch.com/2007/05/23/prototype-of-pandora-wifi-device-shown-tonight-in-san-francisco/> (last visited July 21, 2007) (describing Pandora’s upcoming Wi-Fi enabled service that it plans to launch with a Sandisk device).